START - *THE CALLER:* Jane Doe

Jane Doe has made another "average" call. This time it is an *automated* calling card call, since the transaction was handled without intervention from a live operator.

Revenue - None.

Costs - Jane will receive the charge for the call on her Pacific Bell statement. As in Example #1, Dial-a-Call charges the same rates that AT&T would charge for this call .. $2.18

Jane's hotel bill will reflect a "phone usage charge"..... $0.75

A NOTE ABOUT MAKING AN INFORMED CHOICE

Using the rates in Exhibit I, if Jane had made a direct-dial call, she would have been

THE PROPERTY: The Posh Hotel

Revenue - As an initiative to select Dial-a-Call services, Dial-a-Call agreed to pay The Posh Hotel a commission of 15% of the retail cost ($2.18) of this completed automated BOC calling card call $0.33

The Posh Hotel will add a "phone usage charge" to Jane's hotel bill as previously described $0.75

Costs - None.

A. *THE ORIGINATING LOCAL EXCHANGE COMPANY:* Illinois Bell

Costs - As originating network provider, Dial-a-Call must pay access charges to Illinois Bell of $0.035 per minute for the two 15 second call attempts and for the 5.5 minute call. The Dial-a-Call circuits carrying the call will continue to be used for the duration of the call..... $0.21

As the retail service provider, Dial-a-Call pays a commission on the call to The Posh Hotel. In this example, Dial-a-Call will pay the hotel 15% of the retail cost of the $2.18 call..... $0.33

C. *THE WHOLESALE SERVICE PROVIDER:* Wholesale Provider Corporation

Once the call reaches the Wholesale Provider switch, the Wholesale Provider call processing system identifies the call, generates the "BONG" tone and plays a recording naming Dial-a-Call as the service provider. The system collects the information that Jane enters, then checks internal and external databases to apply the treatment Dial-a-Call has specified, and to determine the validity of the billing information. The external database is provided by Validation Services, Inc..

After checking with Validation Services, the system places the call to Jane's sister's home. The process for the second call is much the same, but the call is completed. The remaining processing for the call is functionally the same as that described in Example

Complete-a-Call Long Distance - $0.055 per minute for 15 seconds of set-up time and for terminating a 5.5 minute call (includes termination to Michigan Bell of $0.20):..... $0.32

Total Costs:..... $1.39

D. *THE VALIDATION PROVIDER:* Validation Services, Inc.

Validation Service's participation is operationally the same as that described in Example #1

Revenue - Validation Services, Inc., will charge $0.06 for each validation attempt. Since Jane attempted to bill calls twice, two validation attempts were made, even though one call was never completed $0.12

Costs - None.

E. *THE BILLING CLEARINGHOUSE:* Operator Billing Company

Operator Billing Company's participation is operationally the same as that described in Example #1, except that the billing information is provided to Pacific Bell for inclusion on Jane's bill, rather than to Illinois Bell for inclusion on Jane's brother's bill.

Revenue - Operator Billing Company will charge Wholesale Provider for each call record submitted for billing..... $0.32

Costs - Aside from the processing and accounting costs, Operator Billing Company will be charged per call record submitted for inclusion on the bill the local telephone company billing office prepares to send to Jane's brother. $0.22

F. *THE NETWORK COMPANY:* Long Haul Networks

Long Haul Network's participation is operationally the same as that described in Example #1

Revenue - Long Haul Networks will receive $0.01 per minute from Wholesale Provider for the 15 seconds of set-up time for the successful call and 5.5 minutes for the call itself$0.06

Costs - None.

G. *THE TERMINATING SWITCHED CARRIER:* Complete-a-Call Long Distance

Complete-a-Call's participation is operationally the same as that described in Example #1

Revenue - Complete-a-Call Long Distance will receive $0.055 per minute from Wholesale Provider for the successful 15 second set-up, and for the 5.5 minute call. Complete-a-Call will not charge Wholesale Provider for the uncompleted call attempt.. $0.32

Costs- Complete-a-Call will be charged $0.035 per minute by Michigan Bell for terminating access for the 15 second set-up and 5.5 minute call.. ..... $0.20

H. *THE TERMINATING LOCAL EXCHANGE COMPANY:* Michigan Bell

Michigan Bell's participation is operationally the same as that described in Example #1.

END - *THE CALLED PARTY:* Jane's Sister

Revenue - None.

Costs - None.

Summary -- Example #2: Charging the call to a BOC Calling Card

Revenue

The Posh Hotel

Revenue	$1.08
Costs	($0.00)
Net Revenue	$1.08

Illinois Bell

Revenue	$0.21
Costs	($0.00)
Net Revenue	$0.21

Dial-a-Call

Revenue	$0.89
Costs	($0.54)
Net Revenue	$0.35

Wholesale Provider

Revenue	$1.86
Costs	($1.39)
Net Revenue	$0.47

Validation Services

Revenue	$0.12
Costs	($0.00)
Net Revenue	$0.12

Operator Billing Company

Revenue	$0.32
Costs	($0.22)
Net Revenue	$0.10

Long Haul Networks

Revenue	$0.06
Costs	($0.00)
Net Revenue	$0.06

Complete-a-Call Long Distance

Revenue	$0.32
Costs	($0.20)
Net Revenue	$0.12

Michigan Bell

Revenue	$0.20
Costs	($0.00)
Net Revenue	$0.20

Pacific Bell

Revenue	$0.22
Costs	($0.00)
Net Revenue	$0.22

Costs

Jane Doe

Revenue	$0.00	
Costs	($2.93)	
Net Cost		$2.93

Implementing Billed Party Preference

Having reviewed the way collect and BOC Calling Card calls are processed today, we can examine the same calls following the implementation of Billed Party Preference. First, however, we should take a look at the changes a transition to BPP would require. One of the difficulties in doing so is that there has been mention of implementing BPP only for public payphones, or only for all payphones, or for all public (aggregator)

Changes to LIDB: providers of the Line Identification Data Base would have to modify their systems to store a primary and secondary carrier choice for each billing number.

Consumer education:

- Carrier Selection -- Companies issuing billing numbers would have to ask their customers to select a primary (and secondary?) carrier to be associated with each number which could cause calls to be billed to them. The balloting process would have to be as comprehensive as that for direct dial equal access, but would be far more complicated. It was relatively easy to determine which companies to include on the direct dial ballot, since they were the ones interconnected to the consumer's originating office. With operator-assisted calls, however, the consumer will be selecting carriers for calls made from some other place. What carriers will be available from that place? (It is at this point that one begins to understand why MCI is in favor of Billed Party Preference, and why the smaller, regional players in competitive long distance industry is extremely concerned about its implementation.) Balloting will also be expensive -- NYNEX has estimated the cost of the balloting process at between $13 and $25 million.[8]

- The associated problem of assigning defaults for those consumers who do not select a carrier also must be faced. It has been suggested that no allocation be done, and that the default carrier assignment be the direct dial carrier. Aside from the fact that this carrier may have been assigned by allocation in the first place, there is the additional problem in that the carrier may not provider operator-assisted calling.

- Additionally, callers would have to be educated about what to expect to be different when making calls. Since people typically make operator-assisted calls much less frequently than they do direct dial calls, they would probably have less retention of the education about the new system, prolonging the period of transitional disorientation.

The real issue with the transition, however, is that the public switched network is comprised of many different types of equipment. The amount of time it would take to modify each system would vary by the system manufacturer, the installed location, the connecting equipment, etc. At points in the conversion when connecting equipment was incompatible, manual collection of the billed number would be necessary; in the worst case, a caller might have to provide the billed number to both the access provider operator and the interexchange carrier operator, resulting in delay and frustration. Education to

[8] "In the Matter of Billed party Preference for 0+ InterLATA Calls, CC Docket No. 92-77, Reply Comments of the Bell Atlantic Telephone Companies."

mitigate this would be difficult, since the consumer BPP addresses is usually one away from home -- a transient caller. The implementation period would thus be extremely confusing, as the consumer travels about and encounters various stages of the implementation process, having to relearn the system at each new location.

The costs associated with each of the implementation elements described is still unknown, but it seems safe to say that it would be a lot of money.

The Economic and Operational Impact of Billed Party Preference

Consumers would probably experience some frustration and confusion during the implementation of Billed Party Preference -- but what would the economic and functional impact be once the conversion was complete?

For the purposes of the following examples, we've assumed that all of the parties have made all of the system changes described above, i.e. their conversion is complete.

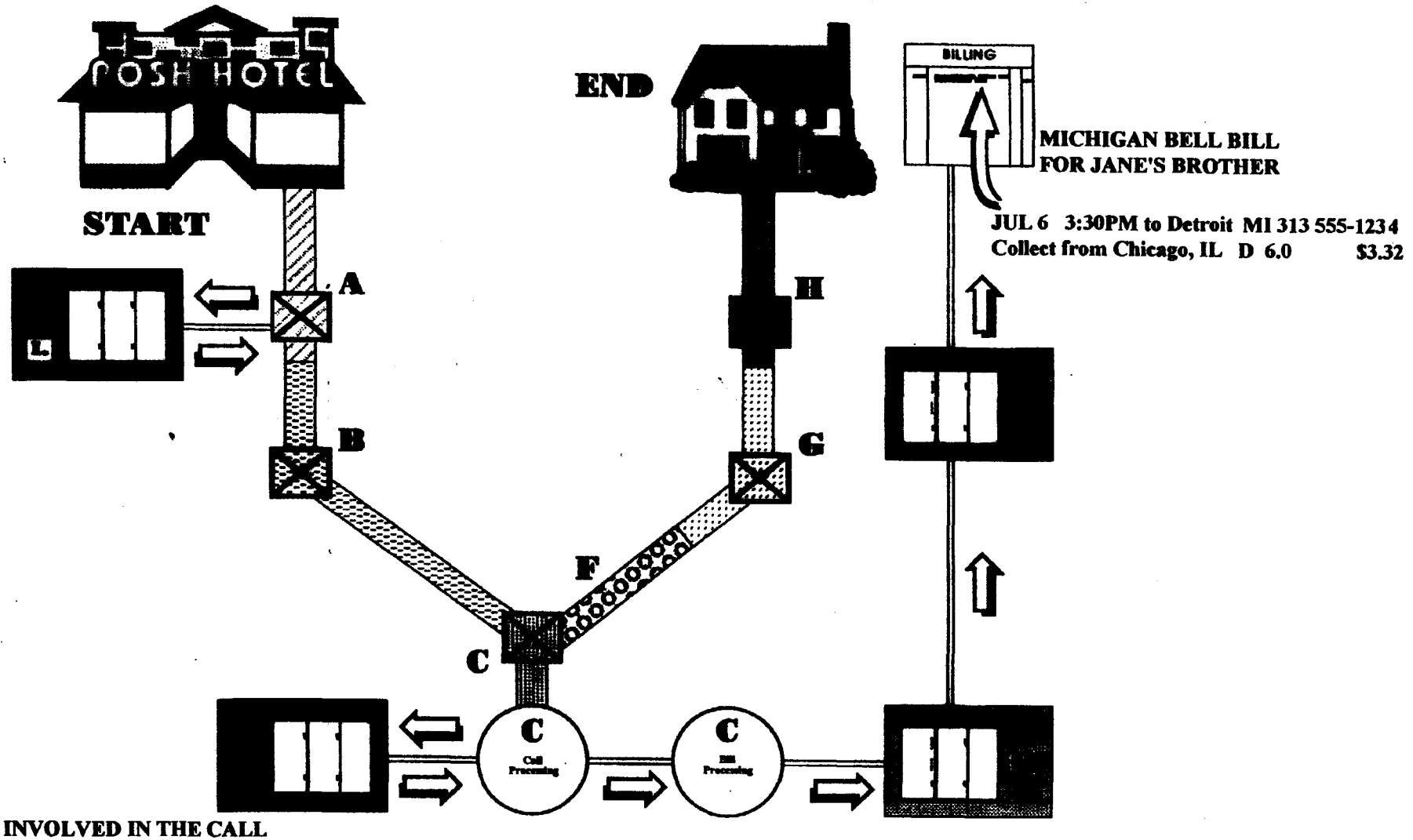
EXAMPLE #3: Charging the call to the called party's number - a Collect Call

Jane Doe of San Diego, CA, is staying at The Posh Hotel in Chicago, Illinois. At 3:30 one Monday afternoon, she makes a long-distance call from her room to her sister who lives in Detroit, Michigan, approximately 300 miles away. Jane dials "8" to access an outside line on the hotel telephone system, then dials "0" plus her sister's area code and number.

She hears an announcement that she has reached Illinois Bell, and a prompt to "Enter your card number or press 1 for a collect call. Press 2 for a third party call, or hold for an operator." Jane presses "1," and an automated voice asks her to wait "one moment please." After a few moments of silence, a live operator says "NCI Operator. May I have your name, please?"

After Jane provides her name to the operator, she is asked to "Please hold." After about half a minute, the operator reports to Jane that no one answered the call, and asks whether Jane would like to make another call. Jane says no, and hangs up the phone.

A few moments later, however, Jane changes her mind and decides to call her brother, who also lives in Detroit, and so she makes a call to her brother's number. The process is the same. Once the call is completed, Jane's brother answers the phone, and when the operator asks whether he will accept the charges for a collect call from Jane Doe, he replies that he will. The operator collects his name, thanks both parties and tells them to go ahead, and then is disconnected from the call. Jane and her brother talk for a little over five minutes before they hang up.



PARTIES INVOLVED IN THE CALL

A. Illinois Bell
B. NCI
C. Wholesale Provider
D. Validation Services Inc.
F. Long Haul Network
G. Complete-a-Call Long Distance
H. Michigan Bell
I. LIDB Provider

FIGURE 3: COLLECT CALL WITH BPP

START - *THE CALLER:* Jane Doe

Jane Doe has made the same call that she made in Example #1.

Revenue - None.

Costs - Jane's hotel bill will reflect a "phone usage charge" assessed by the hotel..... $1.25

A NOTE ABOUT ECONOMICS

In Example #1, the Hotel received a commission on Jane's collect call from Dial-a-Call Long Distance for having selected Dial-a-Call as their PIC for operator-assisted calls. Since the Hotel now has no say in what carrier handles the calls, the Hotel would probably receive no commission.

Like any other industry, members of the hospitality industry compete against one another based on price, with the most important element being the price of the room. The idea is to lower prices, but to still make a profit. If a hotel finds that, to remain competitive, it must lower prices to the point that it will no longer be profitable, the difference will be "hidden" in things like restaurant and bar service -- and telephone charges.

The point of this is that the hotel isn't charging the $0.75 phone usage fee just because it can; if that were the case, a competitor would slice their similar fee and use it as a competitive tool. The usage fee is being charged because it is a necessary element to the profitability of the hotel.

If the Posh Hotel no longer receives a commission of $0.47 from Dial-a-Call for this call, the Hotel will raise the price of something else to make up for it. Perhaps it will be the cost of watching a movie, or of room service. In terms of equity, it will most probably be a corresponding increase in the phone usage charge.

THE PROPERTY: The Posh Hotel

Revenue - The Posh Hotel will add a "phone usage charge" to Jane's hotel bill as described..... $1.25

The Hotel receives no commission on the call.

Costs - None.

A. *THE ORIGINATING LOCAL EXCHANGE COMPANY:* Illinois Bell

A NOTE ABOUT GUARANTEED RATE OF RETURN

We've already discussed how, as a regulated company, Illinois Bell has a guaranteed rate of return. They are, essentially, required to make a certain amount of money. The estimates for the cost of implementing Billed Party Preference vary greatly, but the fact is that, given this profit issue, regulated companies like Illinois Bell will have to raise their rates to pay the cost of implementation. They can't just take it out of profit -- they're not allowed to.

However, without any hard data, any increment to access charge costs to pay for BPP would be speculative, so we've left the access charge at the same $0.035 per minute used in Examples #1 and #2. Frankly, however, we speculate that access costs would increase.

Revenue - Illinois Bell will charge the interexchange company $0.035 per minute in access charges for the period beginning when the call is connected to the NCI network and ending when the Illinois Bell switch determines that Jane or her brother have hung up. It will probably take less time for the IXC operator service provider to attempt a collect call than it did prior to BPP, since the caller doesn't have to wait through the bong tone at the interexchange company switch or communicate the billing method to the IXC operator. We estimate that it will take 10 seconds less, or 40 seconds, to attempt completion of a collect call. Therefore, Illinois Bell will charge NCI for the first 40 second attempt to call Jane's sister, the second 40 second attempt to call Jane's brother, and for the 5.5 minutes that Jane talked to her brother..... $0.24

Illinois Bell will also charge the interexchange company for the billing query service, $.16 per attempt[10], times two attempts. $0.32

Costs - None.[11]

B. *THE INTEREXCHANGE COMPANY:* NCI

NCI's participation is operationally the same as that described for Dial-a-Call in Example #1

---

[10]Estimates of the cost for this service as published in comments and reply comments on Docket No. 92-77 varied from $.11 to $17.5 per attempt; Ameritech's estimate is $.16 ("In the Matter of Billed Party Preference for InterLATA Calls: CC Docket No. 92-77, Comments of the Ameritech Operating Companies").

[11] Illinois Bell will have some cost associated with the LIDB queries. This will very probably be offset with revenue received for providing the same service on behalf of Illinois Bell subscribers.

Revenue - As the originating network provider, NCI will charge Wholesale Provider $0.075 per minute for carrying the call to the Wholesale Provider switch. This covers the Illinois Bell access charges. Wholesale Provider will pay NCI for originating the 40 second unsuccessful attempt, the 40 second successful attempt, and the 5.5 minute call for allowing Wholesale Provider to use the NCI network $0.51

As the retail service provider, NCI will receive from Wholesale Provider a commission of 30% of the retail cost of the $3.32 call, plus $0.32 since Wholesale Provider is not

Costs - Wholesale Provider must pay several different parties:

Originating network provider, NCI Long Distance - $0.075 per minute for allowing Wholesale Provider to use the NCI network to origination two 40 second call set-ups and the 5.5 minute call:..... $0.51

Retail service provider, NCI Long Distance - a commission of 30% of the retail value of the call, plus $0.32 since Wholesale Provider is not providing billing and collections for the call $1.32

Validation Services, Inc. - $0.06 each time a validation request was made to the external database, times two call attempts: $0.12

Terminating network provider, Long Haul Networks - $0.01 per minute for two 30 second completion attempts and one 5.5 minute call: $0.065

Terminating switched network provider, Complete-a-Call Long Distance - $0.055 per minute for 30 seconds of set-up time and for terminating a 5.5 minute call: $0.33

Total Costs:..... $2.35

D. *THE VALIDATION PROVIDER:* Validation Services, Inc.
F. *THE NETWORK COMPANY:* Long Haul Networks
G. *THE TERMINATING SWITCHED CARRIER:* Complete-a-Call Long Distance

Revenue - As the terminating telephone company, Michigan Bell will receive $0.035 per minute from Complete-a-Call Long Distance for the 30 seconds of setup time and the 5.5 minutes for the call to Jane's brother. Michigan Bell will not charge Complete-a-Call for the first call since Jane's sister didn't answer. $0.21

As the billing and collections company, Michigan Bell will also charge NCI $0.22

Costs - None.

END - *THE BILLED PARTY:* Jane's Brother

Revenue - None

Costs - The bill Jane's brother receives will include the detail for a call record including a $1.94 surcharge plus $0.23 per minute for 6 minutes (using whole minute billing increments). $3.32

Summary -- Example #3: Charging the call to the called number (Collect) --Post-BPP

Revenue

The Posh Hotel

Revenue	$1.25
Costs	($0.00)
Net Revenue	$1.25

Illinois Bell

Revenue	$0.56
Costs	($0.00)
Net Revenue	$0.56

NCI

Revenue	$1.83
Costs	($0.78)
Net Revenue	$1.05

Wholesale Provider

Revenue	$3.32
Costs	($2.35)
Net Revenue	$ 0.97

Validation Services

Revenue	$0.12
Costs	($0.00)
Net Revenue	$0.12

Long Haul Networks

Revenue	$0.06
Costs	($0.00)
Net Revenue	$0.06

Complete-a-Call Long Distance

Revenue	$0.33
Costs	($0.21)
Net Revenue	$0.12

Michigan Bell

Revenue	$0.43
Costs	($0.00)
Net Revenue	$0.43

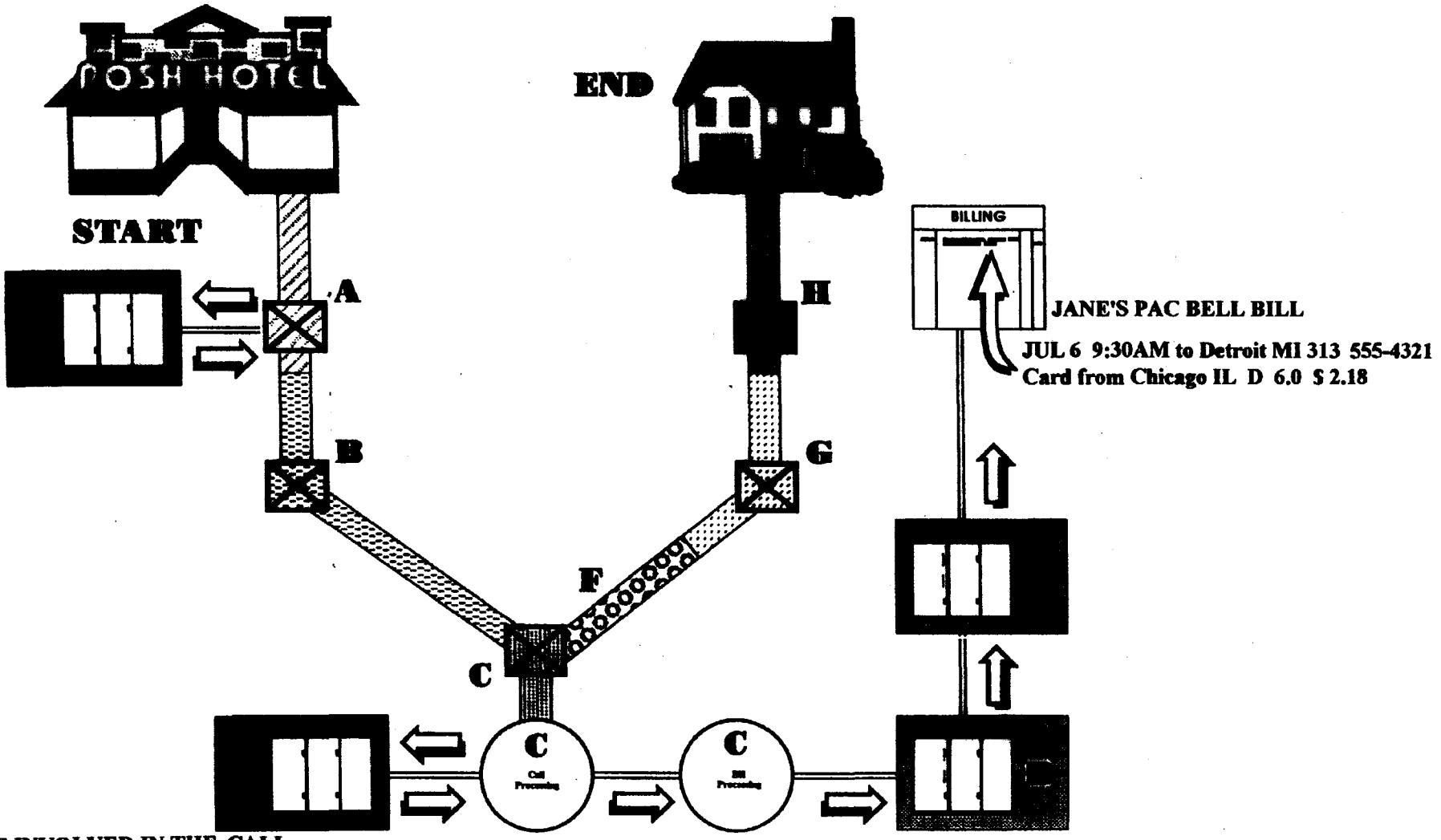
Costs

Jane Doe

Revenue	$0.00
Costs	($1.25)
Net Cost	$1.25

Jane's Brother

Revenue	$0.00
Costs	($3.32)
Net Cost	$3.32



PARTIES INVOLVED IN THE CALL

A. Illinois Bell
B. NCI
C. Wholesale Provider
D. Validation Services Inc.
F. Long Haul Network
G. Complete-a-Call Long Distance
H. Michigan Bell
I. Pacific Bell
J. LIDB Provider

FIGURE 4: CALLING CARD CALL WITH BPP

EXAMPLE #4: Charging the call to a card issued by a Bell Operating Company (BOC) -- Post-BPP

In Example #4, Jane Doe makes the same BOC Calling Card-billed call that she made in Example #2. She dials "8" to access an outside line on the hotel telephone system, then dials "0" plus her sister's area code and number. She hears an announcement that she has reached Illinois Bell, and a prompt to "Enter your card number or press 1 for a collect call. Press 2 for a third party call, or hold for an operator." Jane uses the keypad on the telephone to dial in the 14 digits of her BOC-issued calling card.

After a moment, Jane hears an announcement -- "Thank you for using NCI." Jane is somewhat confused at this point, because she remembers selecting her long distance company, San Diego Long Distance, for operator-assisted calling.[12] Jane hears that her sister's phone is busy.

She hangs up, but repeats the dialing process about five minutes later. This time, Jane hears the telephone ring once, and then her sister answers. Jane and her sister talk for about five-and-a-half minutes, then hang up.

---

[12] Billed Party Preference really puts San Diego Long Distance in a bind. The small regional carrier wants to be able to offer customers "one stop shopping" as it always has, and it goes against the grain to go and tell these customers that it isn't going to offer operator services any more. On the other hand, if it continues to offer the services, it must find a way to handle calls originated from outside of the three LATAs from which it originates traffic. The only solution

A NOTE ABOUT REORIGNATION

In the pre-BPP example, we described how Jane could use the "#" key to reoriginate and access some additional services. This could conceivably work the same way post-BPP, as long as the LECs were willing to forego any call processing involvement.

START - *THE CALLER:* Jane Doe

Jane Doe has made a BOC Calling Card-billed call just like the one described in Example #2.

Revenue - None.

Costs - Jane will receive the charge for the call on her Pacific Bell statement..... $2.18

Jane's hotel bill will reflect a "phone usage charge." As described in Example #3, the charge will be higher than it was prior to BPP to account for the hotel's loss of commission..... $1.25

***THE PROPERTY:* The Posh Hotel**

The Posh Hotel will add a "phone usage charge" to Jane's hotel bill as previously described..... $1.25

Costs - None.

A. *THE ORIGINATING LOCAL EXCHANGE COMPANY:* Illinois Bell

For the first call, the Illinois Bell switching equipment determines that the call is an inter-LATA, operator-assisted call, and so plays a tone and "Illinois Bell" brand and the billing method menu prompt. When Jane enters her card number, the Illinois Bell equipment queries LIDB to determine which carrier has been chosen by Jane to carry calls billed to her Pacific Bell-issued calling card. The system determines that "San Diego Long Distance" is the selected carrier, but that San Diego Long Distance does not have interconnection to this access point. San Diego Long Distance has selected a secondary carrier to handle calls originated from this location, however: "NCI Long Distance." The system routes Jane's call to the NCI network. The entire process of routing to the NCI

network takes approximately 10 seconds, and it takes another 5 seconds to route the call to completion.

When the call is unsuccessful (Jane's sister doesn't answer) and Jane makes the second call, the process is much the same.

Revenue - Illinois Bell will charge NCI $0.035 per minute in access charges for the period beginning when the call is connected to the NCI network and ending when the Illinois Bell switch determines that Jane or her sister have hung up. Illinois Bell will charge NCI for the first 5 second attempt to call Jane's sister, the second 5 second attempt